UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/566,246	01/30/2006	Avshalom Ehrlich	26783	5469

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Mark M Friedman
Bill Polkinghorn
9003 Florinway
Upper Malboro, MD 20772

EXAMINER
GAMI, TEJAL

ART UNIT	PAPER NUMBER
2121	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/566,246	EHRLICH, AVSHALOM
	Examiner	Art Unit	
	Tejal J. Gami	2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *18 July 2007*.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-14* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-14* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1.   This office action is responsive to an AMENDMENT entered July 18, 2007 for the

patent application 10/566246.

Status of Claims

2.   Claims 1-12 were rejected in the last Office Action dated April 18, 2007.

As a response to the April 18, 2007 office action, Applicant has amended Claims

1 and 11; and added Claims 13 and 14.

Claims 1-14 are now pending in this office action.

Drawings Objections

3.   Examiner thanks Applicant for amending the drawings in response to the

objections of the previous office action. Those objections have been withdrawn.

Claim Rejections - 35 USC § 102

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5.   Claims 1-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Iida et al. (U.S. Publication Number: 2002/0180878).

As to independent claim 1, Iida discloses a method to provide feedback to an operator of a device having feedback delay (see Paragraph [0115]), comprising the steps of:

a) displaying upon at least a portion of a display a first image of a view from the device, the device being at a first position (e.g., view position of the image currently displayed) (see Paragraph [0076]);

b) issuing a movement command (e.g., optical operation command) to cause a desired movement of the device to a second position (e.g., target position) (see Paragraph [0076]); and

c) displaying a second image of a predicted view (e.g., predictive frame) from the device at said second position (e.g., target position) prior to the operator receiving real feedback of said movement command (see Paragraph [0082] and [0099]), said second image occupying a portion of said display that is substantially identical to said portion of said display upon which said first image was displayed, said second image replacing said first image (e.g., capture) (see Paragraph [0099]).

As to independent claim 11, Iida discloses a feedback system for an operator of a device having a camera (see Paragraph [0115]), comprising:

a) a control arrangement configured for issuing a movement command (e.g., optical operation command) to cause a desired movement of the device from a first

position (e.g., current view position) to a second position (e.g., target position) (see

Paragraph [0076]); and

b) a display configured for:

i) displaying, upon at least a portion of said display, a first image of a view

from the device, the device being at a first position (e.g., view position of the

image currently displayed) (see Paragraph [0076]); and

ii) displaying a second image (e.g., predictive frame) prior to the operator

receiving real feedback of said movement command (e.g., optical operation command),

said second image (e.g., predictive frame) being a predicted view (e.g., predictive

frame) from the device at said second position (e.g., target position), said second image

being based upon at least part of said first image (e.g., comparing the current view

position and the target position) (see Paragraph [0082] and [0099]), said second image

occupying a portion of said display that is substantially identical to said portion of said

display upon which said first image was displayed, said second image replacing said

first image (e.g., capture) (see Paragraph [0099]).

As to dependent claim 2, Iida teaches the method of claim 1, wherein said

second image is based upon at least part of said first image (e.g., comparing the current

view position and the target position) (see Paragraph [0082] and [0099]).

As to dependent claim 3, Iida teaches the method of claim 2, wherein said

second image includes a filler section outside of said at least part of said first image

(see Paragraph [0046]-[0047] for *field of view*; and Paragraph [0099] for *capture range*).

As to **dependent claim 4**, Iida teaches the method of claim 3, wherein said filler section includes a pattern (see Paragraph [0078]).

As to **dependent claim 5**, Iida teaches the method of claim 4, wherein said filler section includes a repetitive pattern (see Paragraph [0080]).

As to **dependent claim 6**, Iida teaches the method of claim 3, wherein said filler section includes historic image (e.g., old image) data of said predicted view (see Paragraph [0102]).

As to **dependent claim 7**, Iida teaches the method of claim 1, further comprising the step of:

d) displaying a third image of an actual view from the device at said second position (e.g., corrected image) (see Paragraph [0102]).

As to **dependent claim 8**, Iida teaches the method of claim 1, further comprising the step of:

d) limiting said movement command to ensure that said second image can be based upon at least part of said first image (see Paragraph [0046]).

As to **dependent claim 9**, Iida teaches the method of claim 1, wherein said step of issuing said movement command (e.g., optical operation command) and said step of displaying said second image (e.g., target position), occur substantially at the same time (see Paragraph [0055]).

As to **dependent claim 10**, Iida teaches the method of claim 1, wherein said step of displaying said first image is performed by displaying said first image on a screen (e.g., view position of the image currently displayed) (see Paragraph [0076]),

said screen having a frame disposed thereon, said first image being disposed

substantially within said frame and wherein said step of displaying said second image

(e.g., predictive frame) is performed by displaying said second image on said screen

such that, said second image (e.g., predictive frame) includes substantially all image

elements of said first image (e.g., comparing the current view position and the target

position) (see Paragraph [0082] and [0099]).

As to dependent claim 12, lida teaches the system of claim 11, wherein said

display is further configured for displaying a third image of an actual view from the

device at said second position (e.g., corrected image) (see Paragraph [0102]).

As to dependent claim 13, lida teaches the method of claim 3, wherein said

filler section includes filler image data and wherein at least a portion of said filler image

data is manipulated in a manner substantially corresponding to said movement

command (e.g., shaded markers show position of the driving section) (see Figure 9 and

10; and Paragraph [0078]).

As to dependent claim 14, lida teaches the method of claim 11, wherein said

second image is based upon at least part of said first image (e.g., capture of the image

41) (see Paragraph [0081]) and wherein said second image includes a filler section

outside of said at least part of said first image and wherein said filler section includes

filler image data (see Figures 11 and 12) and wherein at least a portion of said filler

image data is manipulated in a manner substantially corresponding to said movement

command (e.g., shaded markers show position of the driving section) (see Figure 9 and

10; Paragraph [0078]).

Response to Arguments

6.   Applicant's amendment and arguments filed July 18, 2007 have been fully

considered. The amendment does not overcome the original art rejection and the

arguments are not persuasive. The following are the Examiner's observations in regard

thereto.

<u>Applicant Argues:</u>

Applicant respectfully contends that it would be clear to one skilled in the art that visual devices such as
the markings on scroll bars of the First Embodiment of Iida et at. '878 or the meters of the Second
Embodiment of Iida '878 require more interpretation on the part of the operator than a display showing an
estimate of the current view from the camera based on a previous view from the camera and modified so
as to account for changes in that view that would be caused by movement commands issued up to that
time, <u>as taught in the present application</u>.

<u>Examiner Responds:</u>

Examiner is not persuaded. See Paragraph [0076] where Iida teaches a control

arrangement configured for issuing a movement command (e.g., optical operation

command) to cause a desired movement of the device from a first position (e.g., current

view position) to a second position (e.g., target position). The claims and only the

claims form the metes and bounds of the invention. Limitations appearing in the

specification but not recited in the claim are not read into the claim. The Examiner has

full latitude to interpret each claim in the broadest reasonable sense. Therefore,

limitations contained in the specification cannot be read into the claims for the purpose

of avoiding the prior art; see <u>In re Sprock</u>, 55 CCPA 743, 386 F.2d 924, 155 USPQ 687

(1968).

Applicant Argues:

In a system where the camera is mounted on a moving vehicle it is highly desirable to present the operator with a view that substantially provides the impression of being in the vehicle and looking along the optical axis of the camera. The moving- frame display taught by Iida et al. '878 does not provide this perspective.
Applicant respectfully contends that the above-described drawbacks of the operator display described by Iida et al. '878 render this system significantly less satisfactory than that described by the present invention for applications such as the remote control of ground vehicles and aircraft.

Examiner Responds:

Examiner is not persuaded. "The remote control of ground vehicles and aircraft" are not

claimed limitations. The claims and only the claims form the metes and bounds of the

invention. Limitations appearing in the specification but not recited in the claim are not

read into the claim. The Examiner has full latitude to interpret each claim in the

broadest reasonable sense. There is not mention of these limitations in the claims and

the specification is not the measure of the invention. Therefore, limitations contained

therein cannot be read into the claims for the purpose of avoiding the prior art; see In re

Sprock, 55 CCPA 743, 386 F.2d 924, 155 USPQ 687 (1968).

Applicant Argues:

While continuing to traverse the Examiner's rejections, Applicant has, in order to expedite the prosecution, chosen to amend independent claims 1 and 11 in order to clarify and emphasize the crucial distinctions between the present invention and the application of Iida et al. '878 cited by the Examiner. Specifically, claims 1 and 11 have been amended to clarify that the second image, which is a result of an estimate of the image currently seen by the camera, based upon a previous image from the camera and the movement commands that have been issued until this time, and, optionally, filler image data and/or historic image data, when available, is displayed upon substantially the same region of the display upon which the first image had been displayed. This is in contradistinction to the Third Embodiment of Iida et al. '878, in which the displayed image is moved from place to place on the display, corresponding to the direction the camera is expected to be pointing after the movement commands have been executed.

Examiner Responds:

Examiner is not persuaded. In addition to the prior art cited above, Iida teaches the second image (e.g., capture of image 41) (see Paragraph [0081]) is based upon a previous image from the camera and the movement commands that have been issued until this time (see Paragraph [0080]). Also see Figures 9-12 for filler image data. Under such considerations, the prior art teaches the claims as written.

Conclusion

7.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tejal J. Gami whose telephone number is (571) 270-1035. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on (571) 272-3687. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Anthony Knight
Supervisory Patent Examiner
Tech Center 2100

TJG